

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057327 A1

(51) International Patent Classification⁷: **G01N 31/00**,
33/00 // C07K 14:445

(21) International Application Number:
PCT/IN2003/000374

(22) International Filing Date: 1 December 2003 (01.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
965/MAS/2002 20 December 2002 (20.12.2002) IN

(71) Applicant (for all designated States except US): **THE REGISTRAR, INDIAN INSTITUTE OF SCIENCE**,
[IN/IN]; Sir C. V. Raman Avenue, Karnataka State, 560 012 Bangalore (IN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **UTPAL, Tatu**

[IN/IN]; Bio Chemistry Department, 21, Ramanuja Apartment, IISC Campus, Karnataka State, 560 012 Bangalore (IN). **SOUNDARA RAGHAVAN, Pavithra** [IN/IN]; Bio Chemistry Department, IISC, Karnataka State, 560 012 Bangalore (IN). **GOWRISHANKAR, Banumathy** [IN/IN]; Bio Chemistry Department, IISC, Karnataka State, 560 012 Bangalore (IN).

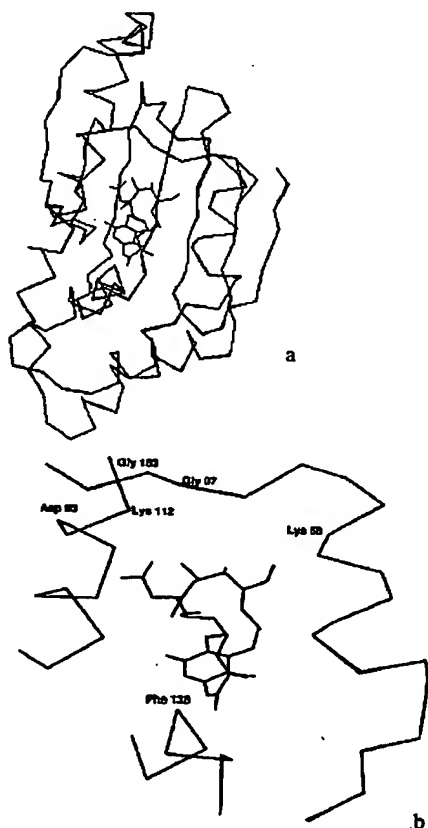
(74) Agent: **VAIDYANATHAN, Alamelu**; 451, 2nd Cross, 3rd Block,, 3rd Stage, Basaweshwarnagar, Karnataka State, 560 079 Bangalore (IN).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: A NOVEL ASSAY TO SCREEN FOR ANTI-MALARIALS

(57) Abstract: Malarial parasite *Plasmodium falciparum* is responsible for the most severe form of malaria in humans, causing about 2 million deaths every year. Lack of effective vaccines and emergence of drug-resistant strains necessitate the need of novel drug targets to treat the disease. The present invention describes a novel assay method of identifying candidate compounds as anti-malarials based on the property of binding to plasmodial parasite 90 kDa heat shock protein.





(84) **Designated States (regional):** ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM,

TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.